

AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions and listings of claims in this application.

Listing of Claims:

1. (Currently Amended) A process for producing a polyamide with titanium dioxide pigments, comprising:

dispersing the titanium dioxide pigments in a mixture containing water and caprolactam with an apparatus, said apparatus comprising

a dispersing chamber,

a disk-shaped rotor disposed in said dispersing chamber,

a stator which has radial openings and is disposed in conjunction with said rotor in a dispersing zone of said dispersing chamber,

a product inlet on each side of said rotor, such that the confluence of two product streams from each of the product inlets is disposed in the outer peripheral region of the disk-shaped rotor, and

a product outlet at the outer periphery of said dispersing zone of said dispersing chamber,

by feeding the titanium dioxide pigments through one of said product inlets and the mixture, containing water and caprolactam, through the other said product inlet to said dispersing chamber, and obtaining a product mixture, containing water, caprolactam and the titanium dioxide pigment from said product outlet, and

polymerizing said product mixture to form the polyamide containing titanium dioxide pigments and wherein water is removed from the product mixture before or during the polymerization,

wherein an average pressure build-up of the polymerized product is about 7 bar/kg.

2. (Previously presented) A process as claimed in claim 1, wherein the mixture containing water and caprolactam further comprises a dispersing assistant.

3. (Cancelled).

4. (Previously presented) A process as claimed in claim 1, wherein additional caprolactam is added to the product mixture before or during the polymerization.

5. (Previously presented) A polyamide containing titanium dioxide pigments obtained by a process as claimed in claim 1.

6. (Previously presented) The use of a polyamide containing titanium dioxide pigments obtained by a process as claimed in claim 1 as a masterbatch for delustering or coloration of a polymer.

7. (Previously presented) The process of claim 1, wherein the product inlets have an axial channel section.

8. (Previously presented) The process of claim 1, wherein the mixture containing water and caprolactam includes a weight ratio of water:caprolactam from 1:1 to 99:1.

9. (Previously presented) The process of claim 8, wherein the ratio of water:caprolactam is from 4:1 to 97:3.

10. (Previously presented) The process of claim 1, wherein the mixture containing water and caprolactam and the titanium dioxide pigments are added to each of the product inlets in a weight ratio of pigment:mixture from 1:99 to 1:1.

11. (Previously presented) The process of claim 10, wherein the ratio of pigment:mixture is from 15:85 to 1:3.

12. (Previously presented) The process of claim 1, wherein the titanium dioxide pigments have a mean average particle size of less than 1-2 microns as measured by optical microscopy.